

IN THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in this application:

Claims 1-9 (Cancelled).

Claim 10 (Currently Amended): A process for bonding a polymer coated carrier to a refrigerated substrate, said process comprising

coating said carrier with said polymer, and  
~~contacting~~ bonding said polymer coated carrier with said refrigerated substrate,  
wherein said polymer is a free radically polymerized, UV cross-linkable addition polymer,

said polymer comprises at least 50 wt.% of at least one C<sub>2</sub>-C<sub>18</sub> alkyl(meth)acrylate and from 0.1-30 wt.% of a polymerized monomer A,

wherein said monomer A does not contain carboxylic acid or carboxylic anhydride groups and has a water solubility of more than 5 grams monomer per liter of water, ~~and~~  
~~said substrate is a moist substrate.~~

Claim 11 (Cancelled).

Claim 12 (Currently Amended): The process of Claim 10, wherein said polymer comprises from 50-99.85 wt.% of at least one C<sub>2</sub>-C<sub>18</sub> alkyl(meth)acrylate and from 0.05-10 wt.% of said polymerized monomer A, which comprises at least one ethylenically unsaturated compound, ~~wherein said ethylenically unsaturated compound~~ which has a photoinitiator group.

Claim 13 (Previously Presented): The process as claimed in Claim 11 wherein the ethylenically unsaturated compound is an acetophenone or a benzophenone.

Claim 14 (Previously Presented): The process of Claim 10, wherein the polymer has a K value of from 30-80 measured in 1% strength by weight solution of the polymer in tetrahydrofuran at 21 C.

Claim 15 (Previously Presented): The process of Claim 10, wherein the polymer has a glass transition temperature of from -60 to +10 C.

Claim 16 (Previously Presented): The process of Claim 10, wherein the monomer A is selected from the group consisting of a hydroxyalkyl (meth)acrylate, methyl (meth)acrylate, (meth)acrylonitrile, (meth)acrylamide and mixtures thereof.

Claim 17 (Previously Presented): The process as claimed in Claim 10 wherein the polymer is a melt.

Claim 18 (Previously Presented): The process of Claim 10, wherein the carrier is first coated with the polymer to form a polymer coated carrier, then the polymer is cross linked by high-energy radiation, then the polymer coated carrier is bonded to a ~~moist~~ refrigerated substrate.

Claim 19 (Previously Presented): The process of Claim 18, wherein the carrier is a label, adhesive tape or sheet.

Claim 20 (Previously Presented): The process of Claim 18 wherein the high-energy radiation is UV light.

Claim 21 (Cancelled).

Claim 22 (Currently Amended): A method of applying a carrier to a ~~moist~~ refrigerated substrate, said method comprising

applying a free radically polymerized, UV cross-linkable polymer to said carrier, wherein said polymer is in a melted form, a solution or an aqueous dispersion,

removing a solvent or water, if present, then

cross linking said polymer by high energy radiation, then

bonding the carrier, coated with a polymer to a ~~moist~~ refrigerated substrate,

~~wherein said polymer is in a melted form, a solution or an aqueous dispersion,~~

said polymer is a free radically polymerized, UV cross-linkable addition polymer,

said polymer comprises at least 50 wt.% of at least one C<sub>2</sub>-C<sub>18</sub> alkyl(meth)acrylate

and from 0.1-30 wt.% of a polymerized monomer A, and

wherein said monomer A does not contain carboxylic acid or carboxylic anhydride groups and has a water solubility of more than 5 grams monomer per liter of water.

Claim 23 (Cancelled).

Claim 24 (Previously Presented): The method of Claim 22 wherein the carrier is a label, adhesive tape or sheet.

Claim 25 (New): A process for producing a refrigerated substrate, comprising:

coating a carrier with a polymer, and  
bonding said polymer coated carrier with said refrigerated substrate,  
wherein said polymer is a free radically polymerized, UV cross-linkable addition  
polymer,

said polymer comprises at least 50 wt.% of at least one C<sub>2</sub>-C<sub>18</sub> alkyl(meth)acrylate  
and from 0.1-30 wt.% of a polymerized monomer A,

wherein said monomer A does not contain carboxylic acid or carboxylic anhydride  
groups and has a water solubility of more than 5 grams monomer per liter of water.

Claim 26 (New): The process of Claim 25, wherein said polymer comprises from 50-  
99.85 wt.% of at least one C<sub>2</sub>-C<sub>18</sub> alkyl(meth)acrylate and from 0.05-10 wt.% of said  
polymerized monomer A, which comprises at least one ethylenically unsaturated compound  
which has a photoinitiator group.

Claim 27 (New): The process as claimed in Claim 26, wherein the ethylenically  
unsaturated compound is an acetophenone or a benzophenone.

Claim 28 (New): The process of Claim 25, wherein the polymer has a K value of  
from 30-80 measured in 1% strength by weight solution of the polymer in tetrahydrofuran at  
21 C.

Claim 29 (New): The process of Claim 25, wherein the polymer has a glass transition  
temperature of from -60 to +10 C.

Claim 30 (New): The process of Claim 25, wherein the monomer A is selected from the group consisting of a hydroxyalkyl (meth)acrylate, methyl (meth)acrylate, (meth)acrylonitrile, (meth)acrylamide and mixtures thereof.

Claim 31 (New): The process as claimed in Claim 25, wherein the polymer is a melt.

Claim 32 (New): The process of Claim 25, wherein the carrier is first coated with the polymer to form a polymer coated carrier, then the polymer is cross linked by high-energy radiation, then the polymer coated carrier is bonded to a refrigerated substrate.

Claim 33 (New): The process of Claim 32, wherein the carrier is a label, adhesive tape or sheet.

Claim 34 (New): The process of Claim 32, wherein the high-energy radiation is UV light.